

O'Bryen, Barbara

From:

Angell, Jon E

Sent:

Wednesday, June 02, 2004 4:42 PM O'Bryen, Barbara

To: Subject:

Sequence Database Search Request

SEARCH REQUEST FORM

Scientific and Technical Information Center

Examiner# : 78697 Art Unit : 1635

Phone Number: 571-272-0756

Date: 6/2/04

Serial Number: 09/945,173 (Meyers)

Mailbox & Bldg/Room Location: REMSEN 2C18

Results Format Preferred: DISK

I would like to have the following searches performed using the following SEQ. ID NOs. from application: 09/945,173

(Meyers)

SEQ ID NO. 1--nucleic acid sequence (size=~1694 nucleotides) Please perform: (1) a standard search of SEQ ID NO. 1, as well as

(2) a search that identifies hits that match SEQ ID NO. 1, but are no longer than 50 nucleotides in length (i.e., size limit search wherein the size limit is set to 50 nucleotides)

SEQ ID NO. 2--amino acid sequence encoded by SEQ ID NO. 1 (size=~236 amino acids)
Please perform a search to identify all nucleic acids which encode the amino acid sequence of SEQ ID NO. 2 (i.e., reverse transcribe & search)

Thanks, Eric

9. Eric Augell Art Unit 1635 Office: REMSEN 2D20 mailbox: REM 2C18 571-272-0756

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on:

June 4, 2004, 19:53:35; Search time 6429 Seconds

(without alignments) 11420.610 Million cell

updates/sec

Title:

US-09-945-173-1

Perfect score: 1694

Sequence:

1 agggaaggcagtggcaagat.....aaacatgaattattgaacta

1694

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched:

3470272 seqs, 21671516995 residues

Total number of hits satisfying chosen parameters:

6940544

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

GenEmbl:*

- 1: gb_ba:*
- 2: gb_htg:*
 3: gb_in:*
 4: gb_om:*
 5: gb_ov:*

- 6: gb_pat:*
- gb_ph:* 7:
- gb_pl:* 8:
- gb_pr:* 9:
- 10: gb_ro:*
- 11: gb_sts:*
- 12: gb_sy:* 13: gb un:*
- 14: gb_vi:*
- 15: em ba:*
- 16: em fun:*
- 17: em hum:*
- 18: em in:*
- 19: em mu:*
- 20: em om:*
- 21: em or:*
- 22: em ov:*
- 23: em pat:*
- 24: em_ph:*
- 25: em_pl:*
- 26: em_ro:*
- 27: em_sts:* 28: em_un:*
- 29: em_vi:*

```
30: em_htg_hum:*
31: em_htg_inv:*
32: em_htg_other:*
33: em_htg_mus:*
34: em_htg_pln:*
35: em_htg_rod:*
36: em_htg_mam:*
37: em_htg_vrt:*
38: em_sy:*
39: em_htgo_hum:*
40: em_htgo_mus:*
41: em_htgo_other:*
```

용

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed,

and is derived by analysis of the total score distribution.

SUMMARIES

Result No.			Length			Descripti	lon
1	1694	100.0	1694	6	AX465669	AX465669	
Sequenc							
2 gani	1680.6	99.2	3362	9	HSM807705	BX647559	Homo
sapi 3	1680.6	99.2	3449	9	HSM807739	BX647593	Homo
sapi							
4	1666.8	98.4	1999	9	BC020832	BC020832	Homo
sapi 5	1660 0	00.0	2252	9	HSM807810	BX647664	IIomo
sapi	1660.8	98.0	3352	9	H2M80/810	BA64/664	HOIIIO
6	1387	81.9	2550	9	AK025772	AK025772	Homo
sapi							
. 7	1022.2	60.3	65838	9	AC133474	AC133474	Homo
sapi 8	1022.2	60.3	146010	9	AC009289	AC009289	Цото
sapi	1022.2	60.3	140010	9	AC009289	AC009289	1101110
9	875.6	51.7	2064	10	BC050194	BC050194	4 Mus
muscu							
10	711	42.0	711	6	AX465671	AX465671	
Sequenc 11	e 395.4	23.3	1291	5	AY391440	AY391440	
Danio r		23.3	1291	5	A1391440	A1391440	
12	374.8	22.1	385	6	BD076273	BD076273	5 '
EST of							
c 13	330.8	19.5	155418	2	AC117754	AC117754	Mus
muscu 14	321	18.9	321	6	AX906158	AX906158	
Sequenc		10.5	341	O	AX300136	AX300138	
15	321	18.9	321	6	BD041691	BD041691	
Sequenc							
16	301.8	17.8	245326	2	AC107288	AC107288	
Rattus :	no 301.8	17 0	266597	2	AC119722	AC119722	
Rattus		1/.0	200391	۷	130117144	110117/22	
18	139.2	8.2	66009	2	AC101250	AC101250	Mus
muscu							

19	135	8.0	119730	9	AC117472	AC117472 Homo
sapi .20	135	8.0	188485	2	AC027454	AC027454 Homo
	102.2	6.0	165836	2	AC138153	AC138153
	102.2	6.0	175167	2	BX571724	BX571724
Danio rer c 23 Danio rer	102.2	6.0	180928	2	AC139727	AC139727
c 24 muscu	92.6	5.5	66009	2	AC101250	AC101250 Mus
c 25 muscu	81.6	4.8	87017	2	AC140043	AC140043 Mus
c 26 sapi	77.6	4.6	29949	2	AC112488	AC112488 Homo
c 27 Macaca mu	77.6	4.6	179351	2	AC143587	AC143587
c 28	67.2	4.0	188485	2	AC027454	AC027454 Homo
29 Drosophil	66.8	3.9	934	3	AY070945	AY070945
c 30 Drosophil	56.8	3.4	8610	2	AC012956	AC012956
31 Drosophil	56.8	3.4	177577	3	AC022349	AC022349
32 Drosophil	56.8	3.4	179016	3	AC018489	AC018489
33 Drosophil	56.8	3.4	300469	3	AE003503	AE003503
34	51.8	3.1	1141	6	AX083744	AX083744
Sequence 35 Plasmodiu	48.8	2.9	254436	3	AE014827	AE014827
c 36	48.2	2.8	134971	2	AC116367	AC116367
Oryza sat	47.6	2.8	1541	8	AK068217	AK068217
Oryza sat	47.6	2.8	247129	2	AC111725	AC111725
Rattus no	47.2	2.8	88549	3	AC116979	AC116979
Dictyoste		2.8	110000	3	PFMAL1P2_1	Continuation
(2 of 41	46.8	2.8	84550	3	PFMAL1P2_3	Continuation
(4 of 42	46	2.7	110000	2	PFMAL13_18	Continuation
(19 o .43	45.8	2.7	131811	9	AC068305	AC068305 Homo
sapi c 44	45.8	2.7	136448	2	AC012231	AC012231 Homo
sapi c 45 sapi	45.8	2.7	138003	2	AC018346	AC018346 Homo

```
JUL-2002
DEFINITION Sequence 1 from Patent WO0218425.
          AX465669
ACCESSION
          AX465669.1 GI:21899929
VERSION
KEYWORDS
SOURCE
          Homo sapiens (human)
 ORGANISM
          Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi;
          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
 AUTHORS
          Meyers, R.A.
 TITLE
           47324, a human g-protein and uses therefor
 JOURNAL
           Patent: WO 0218425-A 1 07-MAR-2002;
          Millennium Pharmaceuticals (US)
FEATURES
                   Location/Qualifiers
                   1. .1694
    source
                   /organism="Homo sapiens"
                   /mol_type="unassigned DNA"
                   /db_xref="taxon:9606"
    CDS
                   19. .729
                   /note="unnamed protein product"
                   /codon_start=1
                   /protein_id="CAD42379.1"
                   /db xref="GI:21899930"
                   /db xref="REMTREMBL:CAD42379"
/translation="MASLDRVKVLVLGDSGVGKSSLVHLLCQNQVLGNPSWTVGCSVD
VRVHDYKEGTPEEKTYYIELWDVGGSVGSASSVKSTRAVFYNSVNGIIFVHDLTNKKS
SQNLRRWSLEALNRDLVPTGVLVTNGDYDQEQFADNQIPLLVIGTKLDQIHETKRHEV
LTRTAFLAEDFNPEEINLDCTNPRYLAAGSSNAVKLSRFFDKVIEKRYFLREGNQIPG
                   FPDRKRFGAGTLKSLHYD"
ORIGIN
                       100.0%; Score 1694; DB 6; Length 1694;
  Query Match
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 1694; Conservative 0; Mismatches
                                              0;
                                                 Indels
                                                          0;
Gaps
       0;
AGGGAAGGCAGTGGCAAGATGGCGTCCCTGGATCGGGTGAAGGTACTGGTGTTGGGAGAC 60
Db
AGGGAAGGCAGTGGCAAGATGGCGTCCCTGGATCGGGTGAAGGTACTGGTGTTGGGAGAC 60
TCAGGTGTTGGGAAATCTTCGTTAGTCCATCTCCTATGCCAAAATCAAGTGCTGGGAAAT 120
TCAGGTGTTGGGAAATCTTCGTTAGTCCATCTCCTATGCCAAAATCAAGTGCTGGGAAAT 120
         121
CCATCATGGACTGTGGGCTGCTCAGTGGATGTCAGAGTTCATGATTACAAAGAAGGAACC 180
```

1694 bp

LOCUS

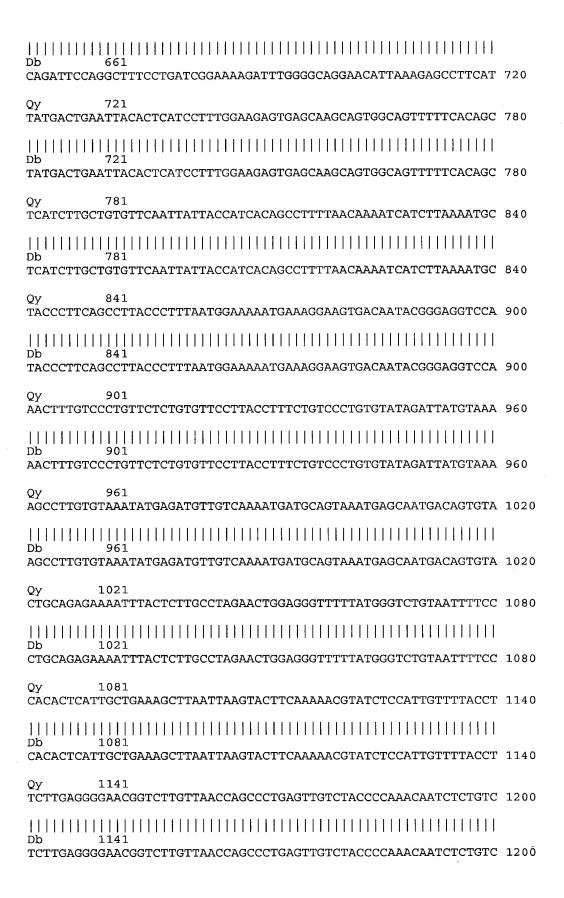
AX465669

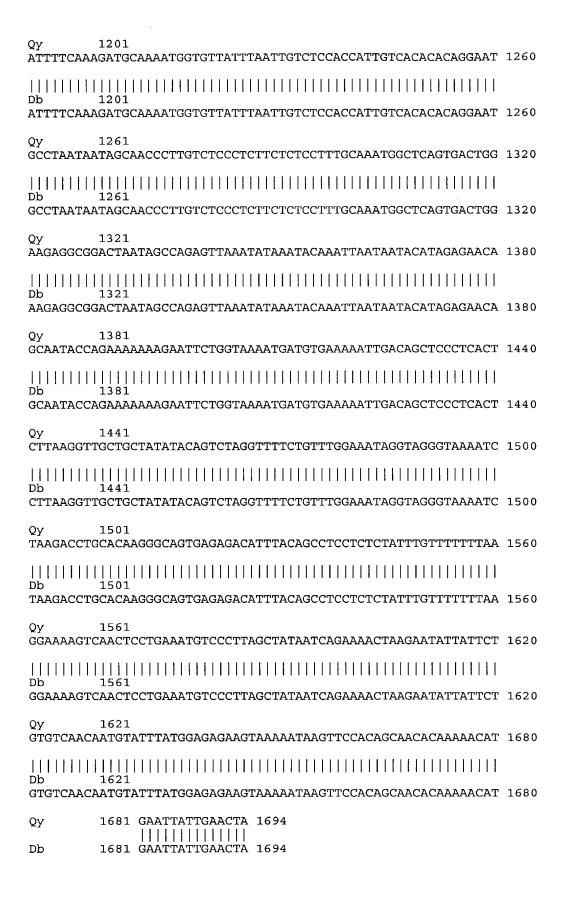
DNA

PAT 16-

linear

Db 121 CCATCATGGACTGTGGGCTCCTCAGTGGATGTCAGAGTTCATGATTACAAAGAAGAACC	180
Qy 181 CCAGAAGAGACCTACTACATAGAATTATGGGATGTTGGAGGCTCTGTGGGCAGTGCC	240
	240
Qy 241 AGCAGCGTGAAAAGCACAAGAGCAGTATTCTACAACTCCGTAAATGGTATTATTTTCGTA	300
	300
Qy 301 CACGACTTAACAAATAAGAAGTCCTCCCAAAACTTGCGTCGTTGGTCATTGGAAGCTCTC	360
	360
Qy 361 AACAGGGATTTGGTGCCAACTGGAGTCTTGGTGACAAATGGGGATTATGATCAAGAACAG	420
	420
Qy 421 TTTGCTGATAACCAAATACCACTGTTGGTAATAGGGACTAAACTGGACCAGATTCATGAA	480
	480
Qy 481 ACAAAGCGCCATGAAGTTTTAACTAGGACTGCTTTCCTGGCTGAGGATTTCAATCCAGAA	540
	540
Qy 541 GAAATTAATTTGGACTGCACAAATCCACGGTACTTAGCTGCAGGTTCTTCCAATGCTGTC	600
	600
Qy 601 AAGCTCAGTAGGTTTTTTGATAAGGTCATAGAGAAGAGA	660
	660
Qy 661 CAGATTCCAGGCTTTCCTGATCGGAAAAGATTTGGGGCAGGAACATTAAAGAGCCTTCAT	720





```
RESULT 2
HSM807705
            HSM807705
LOCUS
                                     3362 bp
                                                mRNA
                                                        linear
                                                                 PRI 30-
AUG-2003
DEFINITION Homo sapiens mRNA; cDNA DKFZp313A1611 (from clone
DKFZp313A1611).
ACCESSION
            BX647559
VERSION
            BX647559.1 GI:34366716
KEYWORDS
SOURCE
            Homo sapiens (human)
 ORGANISM
            Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
            1 (bases 1 to 3362)
 AUTHORS
            Koehrer, K., Beyer, A., Mewes, H.W., Weil, B., Amid, C.,
Osanger, A.,
            Fobo, G., Han, M. and Wiemann, S.
  CONSRTM
            The German Human cDNA Consortium
  TITLE
            Direct Submission
            Submitted (27-AUG-2003) MIPS, Ingolstaedter Landstr.1, D-
  JOURNAL
85764
            Neuherberg, GERMANY
COMMENT
            Clone from S. Wiemann, Molecular Genome Analysis, German
Cancer
            Research Center (DKFZ); Email s.wiemann@dkfz-heidelberg.de;
            sequenced by BMFZ (Biomedical Research Center at the
            Heinrich-Heine-University, Duesseldorf/Germany) within the
CDNA
            sequencing consortium of the German Genome Project. This
clone
            (DKFZp313A1611) is available at the RZPD in Berlin. Please
contact
            the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059
            Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de Further
            information about the clone and the sequencing project is
available
            at http://mips.gsf.de/proj/cDNA/.
FEATURES
                     Location/Qualifiers
    source
                     1. .3362
                     /organism="Homo sapiens"
                     /mol type="mRNA"
                     /db xref="taxon:9606"
                     /clone="DKFZp313A1611"
                     /tissue type="human bone marrow"
                     /clone lib="313 (synonym: hlcc2). Vector pTriplEx2;
host
                     DH10B; sites SfiIA + SfiIB"
                     /dev_stage="adult"
    polyA signal
                     3308. .3313
    polyA site
                     3332
ORIGIN
 Query Match
                          99.2%; Score 1680.6;
                                                 DB 9; Length 3362;
 Best Local Similarity
                          99.8%; Pred. No. 0;
 Matches 1683; Conservative
                                 0; Mismatches
                                                    4: Indels
                                                                  0;
Gaps
```

AGGGAAGGCAGTGGCAAGATGGCGTCCCTGGATCGGGTGAAGGTACTGGTGTTGGGAGAC 60

	69
Qy 61 TCAGGTGTTGGGAAATCTTCGTTAGTCCATCTCCTATGCCAAAATCAAGTGCTGGGAAAT	120
	129
Qy 121 CCATCATGGACTGTGGGCTGCTCAGTGGATGTCAGAGTTCATGATTACAAAGAAGGAACC	180
	189
Qy 181 CCAGAAGAGAGACCTACTACATAGAATTATGGGATGTTGGAGGCTCTGTGGGCAGTGCC	240
	249
Qy 241 AGCAGCGTGAAAAGCACAAGAGCAGTATTCTACAACTCCGTAAATGGTATTATTTTCGTA	300
	309
Qy 301 CACGACTTAACAAATAAGAAGTCCTCCCAAAACTTGCGTCGTTGGTCATTGGAAGCTCTC	360
	369
Qy 361 AACAGGGATTTGGTGCCAACTGGAGTCTTGGTGACAAATGGGGATTATGATCAAGAACAG	
AACAGGGATTTGGTGCCAACTGGAGTCTTGGTGACAAATGGGGATTATGATCAAGAACAG Qy 421	
TTTGCTGATAACCAAATACCACTGTTGGTAATAGGGACTAAACTGGACCAGATTCATGAA	480
Db 430 TTTGCTGATAACCAAATACCACTGTTGGTAATAGGGACTAAACTGGACCAGATTCATGAA	489
Qy 481 ACAAAGCGCCATGAAGTTTTAACTAGGACTGCTTTCCTGGCTGAGGATTTCAATCCAGAA	540
	549

Qy 541

GAAATTAATTTGGACTGCACAAATCCACGGTACTTAGCTGCAGGTTCTTCCAATGCTGTC 600
GAAATTAATTTGGACTGCACAAATCCACGGTACTTAGCTGCAGGTTCTTCCAATGCTGTC 609
Qy 601 AAGCTCAGTAGGTTTTTGATAAGGTCATAGAGAAGAGATACTTTTTAAGAGAAGGTAAT 660
Qy 661 CAGATTCCAGGCTTTCCTGATCGGAAAAGATTTGGGGCAGGAACATTAAAGAGCCTTCAT 720
CAGATTCCAGGCTTTCCTGATCGGAAAAGATTTGGGGCAGGAACATTAAAGAGCCTTCAT 729
Qy 721 TATGACTGAATTACACTCATCCTTTGGAAGAGTGAGCAAGCA
Db 730 TATGACTGAATTACACTCATCCTTTGGAAGAGTGAGCAAGCA
Qy 781 TCATCTTGCTGTGTTCAATTATTACCATCACAGCCTTTTAACAAAATCATCTTAAAATGC 840
TCATCTTGCTGTGTTCAATTATTACCATCACAGCCTTTTAACAAAATCATCTTAAAAATGC 849
Qy 841 TACCCTTCAGCCTTACCCTTTAATGGAAAAATGAAAGGAAGTGACAATACGGGAGGTCCA 900
TACCCTTCAGCCTTACCCTTTAATGGAAAATGAAAGGAAGTGACAATACGGGAGGTCCA 909
Qy 901 AACTTTGTCCCTGTTCTCTGTCCTTACCTTTCTGTCCCTGTGTATAGATTATGTAAA 960
AACTTTGTCCCTGTTCTCTGTCCTTACCTTTCTGTCCCTGTGTATAGATTATGTAAA 969
Qy 961 AGCCTTGTGTAAATATGAGATGTTGTCAAAATGATGCAGTAAATGAGCAATGACAGTGTA 1020
AGCCTTGTGTAAATATGAGATGTTGTCAAAATGATGCAGTAAATGAGCAATGACAGTGTA 1029
Qy 1021
CTGCAGAGAAATTTACTCTTGCCTAGAACTGGAGGGTTTTTATGGGTCTGTAATTTTCC 1080
ርምርር እር እር እ እ እ የምምን ርምር ምምርር ለርእር እርምርር እርደር ምምር የመመርር ርምር ሞል እምም ምርር 1089

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

(without alignments) 11422.386 Million cell

updates/sec

Title:

Run on:

US-09-945-173-1

Perfect score: 1694

Sequence:

1 agggaaggcagtggcaagat.....aaacatgaattattgaacta

June 4, 2004, 21:11:55; Search time 6428 Seconds

1694

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched:

3470272 seqs, 21671516995 residues

Total number of hits satisfying chosen parameters:

1603530

Minimum DB seq length: 0 Maximum DB seq length: 50

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

GenEmbl:*

1: gb ba:*

2: gb htg:*

3: gb_in:*

4: gb_om:*

5: gb_ov:*

6: gb_pat:*

7: gb_ph:*

8: gb_pl:*

9: gb_pr:*

10: gb ro:* 11: qb sts:*

12: gb sy:*

13: gb un:*

14: gb vi:*

15: em ba:*

16: em fun:*

17: em hum:*

18: em in:*

19: em mu:*

20: em_om:*

21: em_or:*

22: em_ov:* 23: em_pat:*

24: em_ph:*

25: em_pl:* 26: em_ro:*

27: em_sts:*

28: em_un:*

29: em_vi:*

```
30: em_htg_hum:*
31: em_htg_inv:*
32: em_htg_other:*
33: em_htg_mus:*
34: em_htg_pln:*
35: em_htg_rod:*
36: em_htg_rod:*
37: em_htg_vrt:*
38: em_sy:*
39: em_htgo_hum:*
40: em_htgo_mus:*
41: em_htgo_other:*
```

용

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed,

and is derived by analysis of the total score distribution.

SUMMARIES

Result No.			Length	DB	ID	Description
						
, 1	23	1.4	50	6	AR095375	AR095375
Sequence c 2	22.6	1.3	50	8	ATH531634	AJ531634
Arabidop		1.5	50	o	AIIIJJIOJ4	A0331034
c 3 -	22.2	1.3	41	6	AX772159	AX772159
Sequence 4	22.2	1.3	47	6	AR291819	AR291819
Sequence		1.3	4 /	0	AR291019	AR251615
- 5	22.2	1.3	49	1	AFU430318	AJ430318
Archaeog		1.2	4.7	_	NVC15661	AVE15661
6 Sequence	21.8	1.3	41	6	AX515661	AX515661
7	21.8	1.3	41	6	AX518256	AX518256
Sequence				_		
8 Sequence	21.8	1.3	47	6	AR291554	AR291554
9	21.6	1.3	42	10	MMU232767	AJ232767 Mus
muscu						
10	21.2	1.3	39	6	AR022583	AR022583
Sequence 11	21.2	1.3	39	6	AR037598	AR037598
Sequence						
12	21.2	1.3	39	6	AR166584	AR166584
Sequence 13	21.2	1.3	39	6	AR178056	AR178056
Sequence		1.5	33	Ū	111(1,000)	111.17.0000
14	21.2	1.3	47	6	AR291096	AR291096
Sequence 15	20.8	1.2	36	6	AR152139	AR152139
Sequence		1.2	30	O	AR152159	AR132133
16	20.8	1.2	36	6	AR174546	AR174546
Sequence		1 0	2.6		3D404010	AD404010
17 Sequence	20.8	1.2	36	6	AR404212	AR404212
18	20.8	1.2	44	6	AX497105	AX497105
Sequence						

19 20.8	1.2	46	6	122397	122397
Sequence 5 c 20 20.8	1.2	47	6	AR291749	AR291749
Sequence	1.2	1,	J	111231,13	
21 20.8	1.2	48	9	S64862S2	S64863 alpha
1-the 22 20.4	1.2	40	6	AR163454	AR163454
Sequence	1.2	-10	O	AK103434	711(103131
23 20.4	1.2	40	6	BD103192	BD103192 O-
fucosyl		4.0	_	DD102104	DD102104 0
24 20.4 fucosyl	1.2	40	6	BD103194	BD103194 O-
25 20.4	1.2	45	10	MMC1RNA	X60845
M.musculus				,	
c 26 20.4	1.2	47	6	AR288610	AR288610
Sequence					
c 27 20.4	1.2	47	6	AX378249	AX378249
Sequence	1 0	477	_	AV270272	AV270272
c 28 20.4	1.2	47	6	AX378272	AX378272
Sequence 29 20.4	1.2	50	6	AR423115	AR423115
Sequence	1.2	50	Ŭ	111111111111111111111111111111111111111	
30 20.4	1.2	50	6	BD118668	BD118668 EST
and e					
31 20.2	1.2	50	6	I36502	I36502
Sequence 1			_		
32 20.2	1.2	50	6	AR423218	AR423218
Sequence c 33 20.2	1.2	50	6	AX261361	AX261361
Sequence	. 1.2	30	o	AX201301	AM201301
34 20.2	1.2	50	6	BD118771	BD118771 EST
and e					
c 35 20.2	1.2	50	6	BD170451	BD170451
Method of			_	77014007	77014025
c 36 20	1.2	28	6	AR014037	AR014037
Sequence c 37 20	1.2	28	6	121987	I21987
Sequence 73	, 1.2	20	Ŭ	121007	121307
38 20	1.2	39	6	AR302247	AR302247
Sequence					
39 20	1.2	39	6	AR367377	AR367377
Sequence		2.0	_	74000220	****
40 20	1.2	39	6	AX080330	AX080330
Sequence 41 20	1.2	47	6	I11814	I11814
Sequence 3	, 1.2	1,	Ü		131011
42 20	1.2	47	6	BD196579	BD196579
Prostatic					
43 20	1.2	50	6	AX164928	AX164928
Sequence		- ^	_	* mile 2702.6	7 TE 2 7 0 2 C
44 20 Arabidops	1.2	50	8	ATH527926	AJ527926
c 45 19.8	3 1.2	45	6	A67371	A67371
Sequence 12	_ · -	- - ,	-	- · -	
_					

ALIGNMENTS